



August 27, 2002

Via Email

Ms. Sally Shaver, Co-Chair
Mr. John Paul, Co-Chair
U.S. EPA Mercury Work Group
Permits/New Source Review/Air Toxics Subcommittee
Clean Air Act Advisory Committee
Washington, D.C.

Re: ICAC Recommendations for Coal-Fired Plants

Dear Sally and John:

The following recommendations for coal-fired facilities assume facility averaging. They are not based on the "average of the best-performing 12%" of facilities in each subcategory. Rather, they are based on technology available today, and consider the goals of flexibility and cost-effective mercury reductions. Although this basis differs from the statutory MACT analysis, the issue of "achievability" and cost-effective compliance on a wide-spread basis is one the Mercury MACT Work Group has spent a lot of time on, and is of course central to the compliance efforts of affected sources. Thus, we feel these opinions will be helpful.

1. There should be four subcategories: bituminous, sub-bituminous, lignite, and fluidized bed combustors (FBC). Existing control technologies commercially available today exhibit considerably different performance characteristics for the three primary coals, mainly related to the differing characteristics of the mercury species generated. Future control technology development is expected to overcome these differences and permit a higher, more broadly applicable standard.
2. Sources should be allowed to meet either a percent reduction (percent mercury removed as difference between mercury in coal and mercury emitted from stack) or an emission rate (stack concentration in lb/Tbtu). An alternative standard allows the greatest opportunity to select among control options to achieve the most cost-effective compliance, and also does the most to accommodate variability in coals and control technology performance.

3. The emission rate should be input-based (stack concentration in lb/TBTU) for reasons of ease of measurement and comparability with other common emission limits (particulate, SO₂, NO_x).
4. The standard for bituminous should be 90% removal or a comparable emission rate. The standard for sub-bituminous should be 70% removal or a comparable emission rate. These limits can be achieved. We make no recommendations for lignite or FBC.
5. The averaging period should be 30 days on the assumption (which we believe is valid) that CEMS will be available before they are needed for use with this rulemaking. A 30-day averaging period accommodates variability, e.g., coal type, plant operation. If, however, manual measurements are needed, then we support an averaging time on the order of a year due to the needed turnaround time and to accommodate the number of samples that might be recognized as constituting an accurate representation of a given plant's performance.
6. For new sources, current information and experience supports best achievable control technology yielding a mercury reduction percentage of 90%.
7. If EPA decides to regulate non-mercury hazardous air pollutants (HAPS), then PM_{2.5} should be used as a surrogate for metal HAPS (e.g., cadmium, chromium, and lead). (N.B. some air toxics, especially selenium and arsenic, could be in the vapor phase). SO₂ should be used as a surrogate for HCl and HF removal, provided a calcium-based scrubber is used for SO₂ removal. Removal of these surrogates correlates well with the air toxics indicated.

ICAC appreciates the opportunity to participate on the Work Group and looks forward to assisting the U.S. EPA as development of this rule progresses.

Sincerely,

Jeffrey C. Smith